

OIPE

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/866,987

DATE: 10/29/2001

TIME: 15:28:17

Input Set : A:\38621180.app

Output Set: N:\CRF3\10292001\I866987.raw

ENTERED

ENTERED

3 <110> APPLICANT: PLOWMAN, GREGORY D.  
 4 MARTINEZ, RICARDO  
 5 WHYTE, DAVID  
 6 MANNING, GERARD  
 7 SUDARSANAM, SUCHA  
 8 CAENEPEEL, SEAN  
 9 HILL, RON  
 10 FLANAGAN, PETER  
 12 <120> TITLE OF INVENTION: MAMMALIAN PROTEIN PHOSPHATASES  
 14 <130> FILE REFERENCE: 038602/1180  
 16 <140> CURRENT APPLICATION NUMBER: 09/866,987  
 17 <141> CURRENT FILING DATE: 2001-05-30  
 19 <150> PRIOR APPLICATION NUMBER: 60/208,291  
 20 <151> PRIOR FILING DATE: 2000-05-30  
 22 <160> NUMBER OF SEQ ID NOS: 17  
 24 <170> SOFTWARE: PatentIn Ver. 2.1  
 26 <210> SEQ ID NO: 1  
 27 <211> LENGTH: 1026  
 28 <212> TYPE: DNA  
 29 <213> ORGANISM: Artificial Sequence ✓  
 31 <220> FEATURE:  
 32 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic ✓  
 33 phosphatase nucleotide  
 35 <400> SEQUENCE: 1  
 36 aggtggtttc accccaacat cagcaggggtg gaggcggaga agctgttctt atccagaggt 60  
 37 cagcgtgggg acttccttgc caggcccagt gagagcagcc cggggggctt cacgctgtcc 120  
 38 gtcagagagg cccttgggga gggtcattg agtcaggggc tcagcaggac cttttcctcc 180  
 39 cctgtgaggg ccctggggac aggcagggcc tccgtggctg cgaccgtgtt gccagagcct 240  
 40 gggggtgcag ctggggagtg cagcgggggtt cccattgagc tctggtacct gctgggctgc 300  
 41 caggaccccc cgttggagtg gtggtaccac gggcgccctgt ctggcaagga ggctgagaag 360  
 42 ctgctgctgc agaaggggca tccgggcagc ttctgtgtgc acatgagtca gacgatcct 420  
 43 gggggcttcc cgctgtcagc gctgacgcaa ggggtgggacg aggcgcaggg ctcaggccgc 480  
 44 cagccacagg tcacgcacat catgactcac tcccaggtgg gagggggcgg cgagctgggg 540  
 45 cggcctctgg gaagggcggg cggccttggc caggcccctc accgccaccc ccacggccgg 600  
 46 atgagaagtc tctccctgca gccctcaag gccacgagga tcagtgtctg gagcctggag 660  
 47 ggctgtgtgc aggagagcag ggccactgat gccagcggga aggccaggca gggcttcttg 720  
 48 gtggagttca agatgctgca gcagcaggaa tgccgggttc tgtaccctcg gaaggagggg 780  
 49 cagagtgtgg agaacaagcc caagaatcac tacaagaaca tccttccctg tgagggcgga 840  
 50 ggccagggcg tcacccgtcg ggcctggggg agggcctcgc gggcgaggg tgtacatcgc 900  
 51 ctgcagggct gtctgcaggc ctgtctgcag gccacgggtg ctgctttctg ggccacgggt 960  
 52 caccaggaga acacgcgtgt catcgtcatg accaccaggg agatggagcg gggccgggta 1020  
 53 ggggtg 1026  
 56 <210> SEQ ID NO: 2  
 57 <211> LENGTH: 800  
 58 <212> TYPE: DNA ✓  
 59 <213> ORGANISM: Artificial Sequence  
 61 <220> FEATURE:

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62 &lt;223&gt; OTHER INFORMATION: Description of Artificial Sequence: Synthetic

63       phosphatase nucleotide

65 &lt;400&gt; SEQUENCE: 2

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66 gctccgaggc cgccgggccc tctccagag tcccgccagt ccccagagt ccaggccagt 60
67 ccccgccgtc acccggtgcg aaccgcgcag aggcctagtg cagctggcag ccccgccccg 120
68 gcaccgcct gctcttctcg cgggtccgga ccgcgagcgc gggggccgac gggtcgcgc 180
69 tgcgcgggc cggtatggcg gccaccgcgc tgcctggaggc cggcctggcg cgggtgctct 240
70 tctaccgcac gctgctctac accctgttcc gcgggaaggt gccgggtcgg gcgcaccggg 300
71 actggtacca ccgcacgcac cccaccgtgc tgcctggcgc gctgccgttg cggagcttga 360
72 cgcgcagct ggtacaggac gagaacgtgc gcggggtgat caccatgaac gaggagtacg 420
73 agacgaggtt cctgtgcaac tcttcacagg agtggaagag actaggagtc gaggagctgc 480
74 ggtcagcac agtagacatg actgggatcc ccaccttga caacctccag aaggagatcc 540
75 aatttgctct caagtaccag tcgctgggccc agtggttga cgtgcattgt aaggctgggc 600
76 gctccaggag tgccactatg gtggcagcat acctgattca ggtgcacaaa tggagtccag 660
77 aggaggctgt aagagccatc gccaaatccc ggtcatacat ccacatcagg cctggccagc 720
78 tggatgttct taaagagttc cacaagcaga ttactgcacg ggcaacaaag gatgggactt 780
79 ttgtcatttc aaagacatga
800

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82 &lt;210&gt; SEQ ID NO: 3

83 &lt;211&gt; LENGTH: 1380

84 &lt;212&gt; TYPE: DNA

85 &lt;213&gt; ORGANISM: Artificial Sequence

87 &lt;220&gt; FEATURE:

88 &lt;223&gt; OTHER INFORMATION: Description of Artificial Sequence: Synthetic

89       phosphatase nucleotide

91 &lt;400&gt; SEQUENCE: 3

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92 atgtccgccc gctgggttccg gcgcgcgttc ctgcctgggg agccgtctcc cgcgcgcg 60
93 ccgcctgggc cgcgtgccag ccccggtgcc taccgacggc cccgcttctc tcgcggtccc 120
94 agctccagcc ccggggcggc cgacgcctcg cgcgcgccag actcccgccc cgtgcgcagc 180
95 ccgcacagag gacgcacgct accctggaat gcaggctacg ccgagattat caatgcagag 240
96 aaatctgaat tcaatgagga tcaagccgcc tgtgggaagc tgtgcatccg gagatgtgag 300
97 tttggggctg aagaagagtg gctgaccctg tgcccagagg agttcctgac aggccattac 360
98 tgggcaactg tcgatgggca cggcgggtcc gcagcagcca tcttggctgc caacaccctg 420
99 cactcctgct tgcgcgggca gctggaggcc gtggtggaag gcttgggtgg cactcagccc 480
100 cccatgcacc tcaatggccc ctgcatctgc cccagtgaac ctcaagttgt ggaggaaaag 540
101 ggcacaggg cagaagactt ggtgatcggg gcattggaga gtgcctttca ggaatgtgat 600
102 gaggtgatcg ggcgggagct ggaggcctca ggccagatgg gcggctgcac agccctgggtg 660
103 gctgtgtccc tgcagggaaa gctgtacatg gccaatgctg gggatagcag ggccatcttg 720
104 gtgcggagag atgagatacg gccactgagc ttcgagttca cccagagac tgagcggcag 780
105 cggatccagc agctggcctt tgtctatcct gagcttctgg ctggtgagtt caccgcactg 840
106 gagttccctc gcgggctgaa gggggatgac ttgggacaga aggttttgtt cagggatcac 900
107 cacatgagtg gctggagcta caaacgtgtg gagaaatcgg atctcaagta cccactgac 960
108 catggacagg gtaggcaggc tcggttacta ggaacactgg ctgtctcccg gggcctggga 1020
109 gaccatcagc tcagagtcct ggacacaaac atccagctca agcccttctt gctctctgtg 1080
110 ccacaggtga ctgtgctgga tgtggaccag ctggagctac aggaggatga tgtggttgtc 1140
111 atggcaactg atggactctg ggatgtactg tccaacgagc aggtggcatg gctggtgcgg 1200
112 agcttctctc ctgggaacca agaggaccca cacaggttct caaagctggc ccagatgctg 1260
113 atacacagca cacagggaag ggaagacagt ctacacagag aagggcaggt gtccatcgat 1320
114 gacgtctctg tgttcgtgat tcccttgca agtcaggggc aagagagcag tgaccaactga 1380
117 <210> SEQ ID NO: 4

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118 <211> LENGTH: 1164
119 <212> TYPE: DNA
120 <213> ORGANISM: Artificial Sequence
122 <220> FEATURE:
123 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
124     phosphatase nucleotide
126 <400> SEQUENCE: 4
127 atgagagcgt ggatccctgg gtgggttggg cggccgcacg ggggtgccga ggcgtctggg 60
128 ggctgcgct tcggggcgag cgcagcgcaa ggctggcgcg cgcgcatgga ggatgctcac 120
129 tgcacttggc ttctgttacc tggctctgcc cgggctggg ccttgtttgc cgtcctcgac 180
130 ggcacgggtg gggctcgagc tgcccgcttc ggtgcacgcc atttgccagg ccatgtgctc 240
131 caggagctgg gcccgagacc tagcgagccc gagggcgctg gcgaggcgt gcgccgagcc 300
132 ttcttgagcg ccgacgagcg ccttcgctcc ctctggcccc gcgtggaaac gggcggttc 360
133 acggccgtag tgttgctggg ctcccccgcg ttctgttacc tggcgactg cggtgactcc 420
134 cgcgcggtgc tgagccgcgc tggcgccgtg gccttcagca cagaggacca ccggccccctt 480
135 cgaccccggg aacgcgagcg catccacgcc gctggcgcca ccacccgcg ccgccgcgtc 540
136 gagggctctc tggccgtgtc gcgagcggtt ggcgacttta cctacaagga ggctccgggg 600
137 agggcccccg agctacagct cgtttctgcg gagccagagg tggccgcact ggcacgccag 660
138 gctgaggacg agttcatgct cctggcctct gatggcgtct gggacactgt gtctggtgct 720
139 gccctggcgg gactggtggc ttacgcctc cgcttgggcc tggccccaga gcttctctgc 780
140 gcgcagctgt tggacacgtg tctgtgcaag ggcagcctgg acaacatgac ctgcacctg 840
141 gtctgcttcc ctggggcccc taggccttct gaggaggcga tcaggaggga gctagcactg 900
142 gacgcagccc tgggctgcag aatcgctgaa ctgtgtgctt ctgctcagaa gccccccagc 960
143 ctgaacacag ttttcaggac tctggcctca gaggacatcc cagatttacc tctgggggga 1020
144 gggctggact gcaaggccac tgtoattgct gaagtttatt ctgagatctg ccaggtctca 1080
145 gaagagtgcg gagagaaggg gcaggatggg gctgggaagt ccaaccccac gcatttgggc 1140
146 tcagccttgg acatggaggc ctga                                     1164
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150 <211> LENGTH: 429
151 <212> TYPE: DNA
152 <213> ORGANISM: Artificial Sequence
154 <220> FEATURE:
155 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
156     phosphatase nucleotide
158 <400> SEQUENCE: 5
159 ttaggtaatg tgcaagcagt cttatgcaga aatgggaaag gtttttgctt aaccaaagaa 60
160 cactactacac gaaacacaaa tgaaagaaga agaatacttc agaatggagc agtcattagt 120
161 tcaaatgaac cttacgggct ttagagggg caagtaaaaa ctacacgagg acttgattt 180
162 catggaaatc tcaagctgaa aaaatccatt atcccagcac ctcaaactat ttctgtccct 240
163 atagatgacc tatgtcaatt cttattgta gctactaatg gactttggga agttttggat 300
164 aaagagggaag ttgatgtggc aacaaatgaa aaagaatcag acactaagag tttctatgaa 360
165 ggcgagctg agtatgttag ccatgaactt gtaaatgctg ctttactggc tggctccaga 420
166 gacaacatt                                     429
169 <210> SEQ ID NO: 6
170 <211> LENGTH: 342
171 <212> TYPE: PRT
172 <213> ORGANISM: Artificial Sequence
174 <220> FEATURE:
175 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic

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176      phosphatase polypeptide
178 <400> SEQUENCE: 6
179 Arg Trp Phe His Pro Asn Ile Ser Arg Val Glu Ala Glu Lys Leu Phe
180   1           5           10           15
182 Leu Ser Arg Gly Gln Arg Gly Asp Phe Leu Ala Arg Pro Ser Glu Ser
183           20           25           30
185 Ser Pro Gly Gly Phe Thr Leu Ser Val Arg Glu Ala Leu Gly Glu Gly
186           35           40           45
188 Ser Leu Ser Gln Gly Leu Ser Arg Thr Leu Ser Ser Pro Val Arg Ala
189           50           55           60
191 Leu Gly Thr Gly Arg Ala Ser Val Ala Ala Thr Val Leu Pro Glu Pro
192  65           70           75           80
194 Gly Gly Ala Ala Gly Glu Cys Ser Gly Val Pro Ile Glu Leu Trp Tyr
195           85           90           95
197 Pro Leu Gly Cys Gln Asp Pro Ala Leu Glu Trp Trp Tyr His Gly Arg
198           100          105          110
200 Leu Ser Gly Lys Glu Ala Glu Lys Leu Leu Leu Gln Lys Gly His Pro
201           115          120          125
203 Gly Ser Phe Leu Val His Met Ser Gln Ser Asp Pro Gly Gly Phe Pro
204           130          135          140
206 Leu Ser Ala Leu Thr Gln Gly Trp Asp Glu Ala Gln Gly Ser Gly Arg
207 145          150          155          160
209 Gln Pro Gln Val Thr His Ile Met Thr His Ser Gln Val Gly Gly Gly
210           165          170          175
212 Gly Glu Leu Gly Arg Pro Leu Gly Arg Ala Gly Gly Leu Gly Gln Ala
213           180          185          190
215 Pro His Arg His Pro His Gly Arg Met Arg Ser Leu Ser Leu Gln Pro
216           195          200          205
218 Leu Lys Ala Thr Arg Ile Ser Ala Arg Ser Leu Glu Gly Cys Val Gln
219           210          215          220
221 Glu Ser Arg Ala Thr Asp Ala Ser Gly Lys Ala Arg Gln Gly Phe Trp
222 225          230          235          240
224 Val Glu Phe Lys Met Leu Gln Gln Gln Glu Cys Arg Phe Leu Tyr Pro
225           245          250          255
227 Arg Lys Glu Gly Gln Ser Val Glu Asn Lys Pro Lys Asn His Tyr Lys
228           260          265          270
230 Asn Ile Leu Pro Cys Glu Gly Gly Gln Gly Val Thr Arg Arg Ala
231           275          280          285
233 Trp Gly Arg Ala Ser Arg Ala Gln Gly Val His Arg Leu Gln Gly Cys
234           290          295          300
236 Leu Gln Ala Cys Leu Gln Ala Thr Val Ala Ala Phe Trp Ala Thr Val
237 305          310          315          320
239 His Gln Glu Asn Thr Arg Val Ile Val Met Thr Thr Arg Glu Met Glu
240           325          330          335
242 Arg Gly Arg Val Gly Val
243           340
246 <210> SEQ ID NO: 7
247 <211> LENGTH: 201
248 <212> TYPE: PRT

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249 <213> ORGANISM: Artificial Sequence
251 <220> FEATURE:
252 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
253     phosphatase polypeptide
255 <400> SEQUENCE: 7
256 Met Ala Ala Thr Ala Leu Leu Glu Ala Gly Leu Ala Arg Val Leu Phe
257   1           5           10           15
259 Tyr Pro Thr Leu Tyr Thr Leu Phe Arg Gly Lys Val Pro Gly Arg
260           20           25           30
262 Ala His Arg Asp Trp Tyr His Arg Ile Asp Pro Thr Val Leu Leu Gly
263           35           40           45
265 Ala Leu Pro Leu Arg Ser Leu Thr Arg Gln Leu Val Gln Asp Glu Asn
266           50           55           60
268 Val Arg Gly Val Ile Thr Met Asn Glu Glu Tyr Glu Thr Arg Phe Leu
269   65           70           75           80
271 Cys Asn Ser Ser Gln Glu Trp Lys Arg Leu Gly Val Glu Gln Leu Arg
272           85           90           95
274 Leu Ser Thr Val Asp Met Thr Gly Ile Pro Thr Leu Asp Asn Leu Gln
275           100          105          110
277 Lys Gly Val Gln Phe Ala Leu Lys Tyr Gln Ser Leu Gly Gln Cys Val
278           115          120          125
280 Tyr Val His Cys Lys Ala Gly Arg Ser Arg Ser Ala Thr Met Val Ala
281           130          135          140
283 Ala Tyr Leu Ile Gln Val His Lys Trp Ser Pro Glu Glu Ala Val Arg
284   145          150          155          160
286 Ala Ile Ala Lys Ile Arg Ser Tyr Ile His Ile Arg Pro Gly Gln Leu
287           165          170          175
289 Asp Val Leu Lys Glu Phe His Lys Gln Ile Thr Ala Arg Ala Thr Lys
290           180          185          190
292 Asp Gly Thr Phe Val Ile Ser Lys Thr
293           195          200
296 <210> SEQ ID NO: 8
297 <211> LENGTH: 459
298 <212> TYPE: PRT
299 <213> ORGANISM: Artificial Sequence
301 <220> FEATURE:
302 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
303     phosphatase polypeptide
305 <400> SEQUENCE: 8
306 Met Ser Ala Gly Trp Phe Arg Arg Arg Phe Leu Pro Gly Glu Pro Leu
307   1           5           10           15
309 Pro Ala Pro Arg Pro Pro Gly Pro His Ala Ser Pro Val Pro Tyr Arg
310           20           25           30
312 Arg Pro Arg Phe Leu Arg Gly Ser Ser Ser Ser Pro Gly Ala Ala Asp
313           35           40           45
315 Ala Ser Arg Arg Pro Asp Ser Arg Pro Val Arg Ser Pro Ala Arg Gly
316           50           55           60
318 Arg Thr Leu Pro Trp Asn Ala Gly Tyr Ala Glu Ile Ile Asn Ala Glu
319   65           70           75           80

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Use of n and/or Xaa has been detected in the  
Sequence Listing. Review the Sequence Listing  
to ensure a corresponding explanation is present  
in the <220> to <223> fields of each sequence  
using n or Xaa

VERIFICATION SUMMARY

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L:532 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11